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Maintenance Helps

Gas Masks

Remain Effective

When properly sized, fitted and maintained, the MCU-2 Series Protective Mask will protect your face, eyes and respiratory tract from chemical and biological warfare agents and radioactive dust particles. However, to remain effective, the mask requires regular maintenance, even when not in use.

According to Technical Order 14P4-15-1, *Operation and Maintenance Instructions for Chemical-Biological Mask Type MCU-2A/P*, masks must be cleaned and inspected when issued, every six months during peacetime, prior to deployment, and every seven days during contingencies. The TO provides details on maintaining the mask, but a few areas of special concern bear highlighting.

To clean the mask, immerse it and its components (excluding microphone) in a mild liquid detergent and warm water solution. Be sure to remove the filter canister and set it aside. The filter will be ruined if it gets wet.

Clean under the nose cup by gently pulling it away from the flange that holds it. Clean the nose cup and the area around the outlet valve assembly (inside the mask). A soft toothbrush can be used around the outlet valve assembly, and a soft, lint-

free cloth may be helpful in removing dirt and haze, especially from the lens of the mask. Rinse the mask and components in warm water ensuring all detergent is removed.

To disinfect the mask, dip it in a solution of three tablespoons of liquid chlorine bleach and a gallon of water. The mask should only be soaked in the solution for five minutes. Afterward, rinse the mask twice in clear, warm, potable water for two or three minutes.

To disinfect the drinking tube system, fill a canteen with disinfecting solution and connect it to the drinking tube coupling. Squeeze the canteen to force the solution through the drinking tube system, then rinse the canteen twice with clean water.

After cleaning and disinfecting the mask, thoroughly dry it. Once the mask is dry, check the mask outlet valve assembly for disbonding and the drinking tube for cuts or cracks in the rubber.

When reassembling the mask, make sure the nose cup is resealed properly under the flange of the outlet valve assembly. Also, make sure the mask and components are completely dry before installing the filter.

Check lenses to ensure they have not separated from the face piece and

that they have the proper configuration. Never dry-wipe the lens or use alcohol wipes. Masks with stained or scratched lenses that impair normal vision must be condemned.

Inspect the front and side voicemitters for tightness and correct installation (but do not attempt to loosen the front voicemitter retaining ring). Make sure the four pins in the center of the front and side voicemitters face outside the mask.

Finally, protect your mask from damage when it is being stored. Do not place heavy objects on it or keep it in areas where it might be exposed to extreme temperatures (like the trunk of a car). If storing the mask for more than 30 days, leave the head harness or skullcap in its normal position (head harness/skull cap toward the back and not pulled over the face piece front) with no tension applied to the mask or harness/skullcap. This ensures the shape of the face piece does not get distorted over time.

Editor's note: TO 14P4-15-1 can be ordered through your local technical order account manager.

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Protective Mask Assessment Team — Have Tester, Will Travel

After visiting 24 locations in 14 states and five foreign countries in 2001, the Air Force's Protective Mask Assessment Team (PMAT) has hit the road again in 2002. Currently in their second year of operation, PMAT's task is to assess the condition of nuclear, biological and chemical (NBC) protective masks issued to individual service members and report results to higher headquarters.

The team, the only one of its kind in the Air Force, is from Tyndall Air Force Base, FL, and is comprised of contract employees from Applied Research Associates, Inc. They report directly to Headquarters Air Force Civil Engineer Support Agency, the OPR for the Air Force Mask Assessment Program. The Air Staff selects which installations will be visited, about 20 this year, based on enemy threat and wing missions.

During the weeklong visit, the four-member team assesses the serviceability of randomly selected masks from each unit on base. They use the TDA-99M Respirator Function Tester, the Air Force's first portable, integrated respirator function tester, to test the reliability of every functional component of the mask. Each mask that fails a leakage test is retested by another operator on another machine, according to test protocols, to verify it is unserviceable before condemning it.

Although PMAT is not an inspection team, the results it compiles are reported to the wing's senior leadership and up the chain of command to the Air Staff to determine possible trends in user maintenance, adequacy of training and inputs to technical manuals and for configuration management purposes. (Mike Serach, PMAT Chief)